Ser. No. 10/830,019
Attorney Docket: 042264-0101

In the Claims:

1. (Currently Amended) A method of designing a semiconductor circuit device, comprising the steps of:

generating first circuit data comprising information on a first circuit driven by a voltage from a first power system;

5   generating second circuit data comprising information on a second circuit driven by a voltage from a second power system different from the first power system;

obtaining cell data prestored in a storage medium and comprising information on a boundary circuit; and

generating boundary circuit connection information indicating that the boundary

10   circuit is connected on a transmission path between the first circuit and the second circuit wherein the boundary circuit comprises a suppressing circuit for suppressing shoot-through current of a boundary between the first circuit and the second circuit, said suppressing circuit including a logic circuit receiving an enable signal in a first state from one of said first circuit and second circuit which is ON for suppressing said shoot-through current of the boundary

15   between said first circuit and second circuit when the other of said first circuit and second circuit is OFF, and receiving an enable signal in a second state for enabling signal transfer between said first and second circuits when each of said first and second circuits are ON.

2. (Canceled)

3. (Previously Presented) A method of designing a semiconductor circuit device, comprising the steps of:

2

LACA_731737.1

generating first circuit data comprising information on a first circuit driven by a

5   voltage from a first power system;

generating second circuit data comprising information on a second circuit driven by a

voltage from a second power system different from the first power system;

obtaining cell data prestored in a storage medium and comprising information on a

boundary circuit; and

10   generating boundary circuit connection information indicating that the boundary

circuit is connected on a transmission path between the first circuit and the second circuit

wherein the boundary circuit comprises a circuit for preventing circuit malfunction

due to an indeterminate signal between the first circuit and the second circuit when a power

supply of the first circuit is OFF, and a power supply of the second circuit is ON.

4. (Currently Amended) A method of designing a semiconductor circuit device,

comprising the steps of:

generating first circuit data comprising information on a first circuit driven by a

5   voltage from a first power system;

generating second circuit data comprising information on a second circuit driven by a

voltage from a second power system different from the first power system;

obtaining cell data prestored in a storage medium and comprising information on a

boundary circuit; and

10   generating boundary circuit connection information indicating that the boundary

circuit is connected on a transmission path between the first circuit and the second circuit

wherein the boundary circuit comprises a suppressing circuit for suppressing leakage

current of a boundary between the first circuit and the second circuit, said suppressing circuit

3

including a logic circuit receiving an enable signal in a first state from one of said first circuit

15 and second circuit which is ON for suppressing said leakage current of the boundary between

said first circuit and second circuit when the other of said first circuit and second circuit is

OFF, and receiving an enable signal in a second state for enabling signal transfer between

said first and second circuits when each of said first and second circuits are ON.

20

5. (Previously Presented) The method of designing a semiconductor circuit device

according to Claim 1, wherein the boundary circuit further comprises a circuit for level

conversion between the first circuit and the second circuit.

6. (Previously Presented) The method of designing a semiconductor circuit device

according to Claim 1, wherein the boundary circuit further comprises a protection circuit for

protecting a transistor in the first circuit and/or the second circuit from electrostatic discharge.

7. (Previously Presented) The method of designing a semiconductor circuit device

according to Claim 1, wherein the first circuit data, the second circuit data, and the cell data

are data for logic circuit design.

8. (Previously Presented) The method of designing a semiconductor circuit device

according to Claim 1, wherein the first circuit data, the second circuit data, and the cell data

are data for layout design.

4

LACA_731737.1

Ser. No. 10/830,019
Attorney Docket: 042264-0101

9. (Previously Presented) The A semiconductor circuit device designed by a method

of designing a semiconductor circuit device according to Claim 1.

10.-13.(Canceled)

5

LACA_731737.1